**Amendments to the Claims:** 

This listing of claims will replace all prior versions, and listings, of claims in the

application:

**Listing of Claims:** 

Claim 1 (currently amended): A process for obtaining Fructooligosaccharide (FOS),

comprising the steps of:

(a) growing a <u>strain of Aspergillus pullulans</u> <del>culture</del> in a medium at pH in the

range of 5 to 6 and temperature in the range of 25 to 30°C under stirring

condition to obtain an inoculum,

(b) transferring predetermined concentration of the inoculum to a medium

under fermentation conditions to obtain Fructosyl Transferase (FTase),

(c) incubating the FTase with a substrate in the range of 400 to 800 g/l at pH

in the range of 5 to 5.5 for 18 to 24 hrs at a temperature range of 50 to

55° C, and

(d) optionally along with additives to improve quality of FOS.

Claim 2 (original): The process as claimed in claim 1, wherein in step (a) the medium

consists of sucrose in the range of 0.8 to 1.5 % and yeast extract in the range of 0.1 to

0.5 %.

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Claim 3 (original): The process as claimed in claim 1, wherein stirring in step (a) is done at 200 to 250 rpm for 24 to 48 hr.

Claim 4 (currently amended): The process as claimed in claim 1, wherein the culture used in step (a) is selected from group consisting of *Aspergillus oryzae* and comprises

Aspergillus pullulans, capable of producing FTase.

Claim 5 (original): The process as claimed in claim 1, wherein the inoculum used is developed from 5 to 8 days old slant culture.

Claim 6 (original): The process as claimed in claim 1, wherein the FTase is prepared by fermentation process selected from the group consisting of submerged fermentation process and solid state submerged process.

Claim 7 (original): The process as claimed in claim 1, wherein the predetermined concentration of the inoculum varies in the range of 10 to 25 % (v/v) for submerged fermentation and in the range of 10 to 25 % (v/w) for solid state fermentation.

Claim 8 (currently amended): The process as claimed in claim 6, wherein the

submerged fermentation medium for Aspergillus pullulans consists of sucrose in the

range of 10-12 %, yeast extract in the range of 0.7-0.9 %, MgSO<sub>4</sub>.7H<sub>2</sub>O in the range of

0.02-0.04 %, NaNO<sub>3</sub> in the range of 1-3 %, KH<sub>2</sub>PO<sub>4</sub> in the range of 0.3-0.5 %, K<sub>2</sub>HPO<sub>4</sub>

in the range of 0.8-1.0 %, NaCl in the range of 0.5-0.7 % and NH<sub>4</sub>Cl in the range of 0.9-

1.2 % and incubated for 48 to 120 hr at a temperature ranging from 25-30 °C followed

by discarding [[any]] the pellets after filtering the culture broth to obtain FTase.

Claim 9 (withdrawn): The process as claimed in claim 6, wherein the solid state

fermentation medium consists of 10 to 12 gm of rice bran moistened with 10 to 12 ml

water and incubated for 48 to 120 hr at a temperature ranging from 25-30 °C followed

by extraction of moldy bran with water and filtering the same to obtain Fructosyl

Transferase (Ftase).

Claim 10 (previously amended): The process as claimed in claim 1, wherein the FTase

is incubated with the substrate selected from the group consisting of sucrose, jaggery

optionally along with stevia extract as an additive to improve the FOS sweetness.

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Claim 11 (original): The process as claimed in claim 10, wherein stevia extract is in the range of 0.5 to 4%.

Claim 12 (original): The process as claimed in claim 11, wherein the stevia extract is about 1 %.

Claim 13 (original): The process as claimed in claim 10, wherein the increase in sweetness of FOS is about 40%.

Claim 14 (original): The process as claimed in claim 11, wherein the increase in sweetness of FOS is about 36%.

Claim 15 (original): The process as claimed in claim 1, wherein the FOS contains kestose and nystose with functional properties namely non-cariogenicity and prebiotic property.

Claim 16 (original): The process as claimed in claim 1, wherein FOS improves mineral absorption, reduces the total cholesterol and triglyceride levels in the body.

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Claim 17 (original): The process as claimed in claim 1, wherein 2.5 to 20 % of FOS in diet improves the calcium absorption.

Claim 18 (original): The process as claimed in claim 1, wherein 5 to 10 % of FOS in diet improves the magnesium absorption.

Claim 19 (previously amended): The process as claimed in claim 1, wherein up to 10 % of FOS in diet improves the copper absorption.

Claim 20 (previously amended): The process as claimed in claim 1, wherein a dose per day of FOS 8 gm for weeks in the range of 5-6 reduces the cholesterol and triglycerides levels.

Claims 21-25 (cancelled).

Claim 26 (original): The process as claimed in claims 1 and 4, wherein the culture is recycled for production of FOS.

Claim 27 (previously amended): The process as claimed in claim 6, wherein the culture is recycled at least 6 times for production of FOS.